CLAIMS

- 1. A supercapacitor which comprises two electrodes in which each of the two electrodes is comprised of a current collector and an electrode active material adhered to the current collector, a separator positioned between the two electrodes, an electrolyte and a package, wherein the current collector is a metal thin plate having a conductive metal oxide layer thereon and the electrode active material is adhered on a surface of the conductive metal oxide layer.
- 2. The supercapacitor as set forth in claim 1, wherein the conductive metal oxide layer is formed of a material selected from the group consisting of zinc oxide and tin oxide.
- 3. The supercapacitor as set forth in claim 1, wherein the conductive metal oxide layer is formed of zinc oxide.
- 4. The supercapacitor as set forth in claim 1, wherein the metal thin plate is an aluminum thin plate.
- 5. The supercapacitor as set forth in claim 1, wherein at least one of the two electrodes is obtained by dipping a metal thin plate into a solution into which a conductive metal oxide is dissolved, drying the obtained metal thin plate with hot wind in order to form a conductive metal oxide layer on the metal thin plate, and coating the metal thin plate having the conductive metal oxide layer thereon with a slurry containing an electrode active material, followed by drying and pressing to form an electrode active material layer on a surface of the conductive metal oxide layer.